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remarks where he says "It is not a combustion process."[15] KPE also plans to use an 80% MSW briquette after the 50% demonstration phase.[16]

The most obvious explanation for the strained language is that KPE needs to make these arguments in order to avoid the application of Kentucky law. If they are a Waste-to-Energy facility, then they are required to conform to the solid waste plan of Clark County Kentucky.

As of today in Clark County, the majority of the governing body, the County Attorney and the state Representative are publicly pursuing their county's right to require and enforce the permit. If KPE resorts to the courts to avoid the local permitting regulations, a significant delay is certain, and outright failure likely.

KPE has not applied for a permit from Clark County for their proposed facility. Their long standing denial of the need to get such a permit has turned public sentiment in the county against them.

Please see Appendix G, Kentucky Air Quality Permit. Further, under KRS 224, failure to get the required local permit disqualifies the state's right to permit the facility.

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(cont)

Conflict With State Law

The following section is an excerpt from the Kentucky Resource Council's comments on the EPA's draft EIS for the Trapp site.

" The proposal to thermally treat and to combust the volatile fraction of one million tons or more per year of treated municipal solid waste falls squarely within the type of facility intended by the General Assembly to be scrutinized under the solid waste planning process.

KRS 224.40-315 mandates that:
No permit to construct or expand a municipal solid waste disposal facility shall be accepted for processing by the Cabinet unless the application contains a determination from the governing body for the solid waste management area in which the facility is or will be located concerning the consistency of the application with the area solid waste Management plan.

The scope of this statute and the requirement for a determination of consistency with the approved solid waste plan is defined by the term municipal solid waste disposal facility, which is defined in KRS 224.01-010(15)

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15 Op-Ed page, 7/23/2001, Lexington Herald-Leader, Lexington, KY
16Pers Comm: Dwight Lockwood, 12/10/01 c. 7 pm, manager of Regulatory Affairs, Global Energy Inc, Suite 2000, 312 Walnut St, Cincinatti OH 45202

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to include:

Any type of waste site or facility where the final deposition of any amount of municipal solid waste occurs, whether or not mixed with or including other waste allowed under subtitle D of the Federal Resource Conservation and Recovery Act of 1976, as amended, and includes, but is not limited to, incinerators and waste-to-energy facilities that burn municipal solid waste, . . .

Because the material is not a refuse derived fuel under KRS 224.01-010(23) in that it has not been subject to extensive separation of municipal solid waste including the extraction of recoverable materials for recycling the processing of the municipal solid waste stream to create the pelletized fuel does not make the material a recovered material under KRS 224.01-010(20). The proposed gasification step in the process and the cleaning of the volatile fraction of the waste for combustion does not make the facility a recovered material processing facility so as to exempt it from the definition of a municipal solid waste disposal facility or to avoid the obligation to be consistent with the local solid waste plan.

Even assuming that the partially processed waste fell within the ambit of refuse derived fuel and the 15%[17] limitation on RDF didn't limit the applicability of recovered material even as to RDF, the proposed facility is not a recovered material processing facility since it proposes to combust the gases created by the thermal and pressure treatment of the waste and is not storing and processing for resale or reuse.

Reuse, as that term is used by the General Assembly does not include use of wastes as a fuel with or without heat recovery. The latter concept is resource recovery and is a term distinct from reuse of solid waste. See: KRS 224.43-010 (3) which sets reuse of solid waste as a priority below reduction, and above recycling, composting, and resource recovery through mixed waste composting or incineration."

The resolution of the conflicting interpretations of KRS 224 will likely require adjudication. The Federal Government should immediately temper it's affinity for the Trapp facility and recognize that it is bankrolling a project that, at best, violates the spirit of Kentucky voters, and at worst will be killed by failing to get a local siting permit after an ugly court fight. Given the visible statutory issues, this project deserves a time-out, not Federal dollars. By funding the Trapp facility, DOE & EPA help undermine the basis for much of the recent

17 Under Kentucky law, only 15% of the material processed by the facility creating the pellets could be credited as RDF.

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(cont)

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solid waste planning & management in the state of Kentucky.

8/21 (cont.)

Intent to Disregard the Research Results

The DEIS, on page 3-24, Section 3.4.2 'Proposed Actions' states at the end of the second paragraph, 'Data generated during the first-year demonstration would be used to determine if the coal and RDF pellet co-feed would continue after the first year of operation.'

KPE president Musulin has publicly rejected that premise and stated the KPE intends to operate the plant without a new round of permit reviews based on the outcome of the DOE funded research[18].

In regards to the review, who will make the determination to continue the RDF/coal co-feed? The DEIS is sorely inadequate in this area. Absent of any details of the review, no estimation can be made of the quality of environmental protection afforded by the review. The details of the review need to be developed and presented to the public immediately. The state of Kentucky has already issued an Air Quality permit for five years. If the proposed action described in the DEIS to review the data is to occur, then DOE and EPA will have to be the ones to require it.

9/21 (cont.)

Given KPE's clear intent, it is reasonable to require DOE to contractually obligate the review, publish it's full details, seek a bond to secure the agreement, and require Occurance class insurance to assure the intended levels of safety. In the face of evidence to the contrary, the cooperation of KPE cannot be presumed, and must be contractually required. Trusting KPE to volunteer for review and abide by the results can no longer be an option. This contract should also be part of the DEIS, and deserves public comment and review.

DOE's notice of intent to prepare the EIS states clearly that the project is "designed for at least 20 years of commercial operation...", and that "Upon completion of the demonstration, the facility **could** (my emphasis) continue commercial operation."[19] KPE has said "Kentucky Pioneer Energy will furnish Kentucky residents with low-cost power, high-quality jobs, and a cleaner environment for years to come."[20]

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18 pers comm, Mike Musulin, President KPE, 12/11/01 9 pm, just after the close of the formal EPA EIS hearing "If we did that, nothing would ever get built." This comment was made to me, the Lee County Solid Waste Co-ordinator Ms. Neely Back, to Clark County resident, John Maruskin, and others.

19 DOE's Notice of Intent to Prepare an Environmetal Impact Statement for the Kentucky Pioneer IGCC Demonstration Project, Trapp KY

20 Op-Ed page, 7/23/2001, Lexington Herald-Leader, Lexington, KY

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One of two things can be drawn from these facts: either there should be a mandated public review and re-permit at the end of the demonstration because the outcome of the research and the safety of the waste product are uncertain, or that the outcome is certain and does not deserve Federal research monies.

In the event that DOE does fund the R&D facility, it should require, by contract and bond, a new round of public review and a new round of state permits predicated on the results of the test period. The absence of details about the how the data from the first year would be used to determine the continued use of coal/MSW/RDF is a significant omission in the DEIS.

9/21 (cont.)

Unreliable Partners, Private Funding Delays, Inadequate Planning and Uncertainties

KPE & EKPC are having trouble already (see Appendix D, the PSC September 11th hearing). The public pronouncement by KPE that they intend to run the facility without regard to the outcome of the first year flies in the face of the text of the DEIS and challenges the notion that they are a good partner for DOE, EPA, and the public. As well, the determined effort to avoid the local permitting requirements calls into question their commitment to public partnership.

Many of the features of the KP IGCC DEIS are founded on the DOE's partnership with Global Energy, KPE & EKPC. The failure to consider other sites, the inclusion of MSW derived fuels instead of coal, and the reliance on old studies from EKPC's prior EIS's are among those features. The appropriateness of DOE's relaxed efforts is predicated on the quality of their choice of partners. There is evidence that these partners have failed to measure up and casts doubt on their ability or willingness to deliver.

KPE missed it's financial closing deadline of June 30th, 2001. In testimony before the Kentucky Public Service Commission, KPE's partner EKP stated "However, due to the delay in KPE's financing, East Kentucky (EKP) decided that it cannot reasonably rely on that project (Trapp) to satisfy its future power needs."[21]

The Trapp facility had originally been planned as a Duke Energy subsidiary (Ameren) project in southern Illinois, but that encountered siting difficulties and was canceled.[22]

10/22 (cont.)

21 Appendix D. Commonwealth of Kentucky Public Service Commision case 2001-053, report on the hearing of 8/18/01, "Application of East Kentucky Power cooperative, Inc for a certificate of public convenience..."
22 Robert W. Gee,Assistant Secretary for Fossil Energy,

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EKPC failed to send representatives to either of the December 2001 DEIS public comment meetings in Kentucky. KPE has neglected to apply for a critical permit from Clark County. They failed to apply due diligence in the review of applicable law and instead maintain that they are not operating a waste-to-energy facility, preferring a court battle over accommodating the local public.

The Federal Government should not risk public dollars on a project that, by DOE's own admission, may be poorly located, has a track record for last minute siting problems, and is anticipated to fail by it's own corporate partners. The quality of the partnership itself has become suspect in light of facts presented in these comments and appendices.

Disregard for Social Justice and Environmental Issues

Unlike New York, Kentucky has addressed our solid waste disposal problems. 4000 tons a day is a lot of trash. It is nearly half of what Kentucky produces each day. If folks in Trapp Kentucky can afford proper garbage disposal, New Yorkers can too. We have 23 other power plants awaiting permits. None of them want to incinerate 4000 tons of trash a day.

KPE has not offered any incentives to Kentucky. From Kentucky's view it's a clear loss. KPE is an Ohio company. Most jobs and all the profits leave the state. KPE will act to the advantage of it's parent, Global Energy, not EKPC or the Commonwealth. Since no local permit has been sought, there has been no discussion in Clark County of a 'Host Agreement', the contract of mutual benefits imposed on permit holders. Hence, there are no local benefits to offset any undesirable impacts from the facility. The Commonwealth's air quality is more excessively burdened by the metals and other contaminants in the imported MSW/RDF than if KPE burned Kentucky coal. From the Commonwealth's point of view KPE should be demonstrating 100% Kentucky coal. Kentucky already has the lowest energy costs in the nation: there is little demonstrated need for the power generated at Trapp.[23] A facility would be better located nearer it's feedstocks and high rate energy markets than at the proposed Trapp site.

If the Federal Government choses to fund the Trapp facility, many public bads (as opposed to public goods) will occur: Kentucky will see an escalation of landfill costs; elimination of new business opportunities due to increased scarcity of clean air and water; significant,

U.S. Department of Energy, before the Subcommittee on Interior and Related Agencies Committee on Appropriations, on March 14, 2000.
23 http://www.kentuckyconnect.com/heraldleader/news/121601/statedocs/16electricity-plants.htm

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9/22 (cont.)

11/13 (cont.)

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Comment No. 13 **Issue Code: 02**

Economic benefits from the project are presented in Section 5.3, Socioeconomics, of the EIS. The majority of the revenue and income generated by the project would remain within the three-county Region of Influence (ROI) of Clark, Fayette, and Madison Counties. All 120 jobs would be created onsite, with none in Cincinnati. The region would also benefit from the indirect jobs created in other sectors and increases in tax revenue from the project.

Comment No. 14 **Issue Code: 21**

Comment noted. KPE will pursue all required state and local permits after financial closure on the project has been completed. KPE would be required to abide by all state and local regulations, including alerting the public during the public review process throughout the permit acquisition process.

Comment No. 15 **Issue Code: 06**

Comment noted. The metals content of RDF pellets may be higher than that of coal for some heavy metals, but not necessarily for all metals. Some heavy metals (such as beryllium, cobalt, and selenium) may not be present in detectable levels in RDF pellets. EPA's AP-42 emission rate documents do not provide a convenient comparison of uncontrolled heavy metal emission rates for coal versus RDF pellet combustion. Tables 1.1-18 and 2.1-8 in the AP-42 document provide a comparison of emission rates for facilities equipped with similar particulate matter emission controls. The data in those tables are presented as emission rates per ton of fuel. Bituminous coal has a typical heating value slightly more than twice as high as the heating value of RDF pellets (roughly 12,000 British Thermal Units [BTU] per pound for bituminous coal versus 5,500 BTU per pound for RDF pellets). When converted into emission rates on a fuel heat content basis (emission rates per million BTU), using RDF pellets as fuel would appear to produce higher emission rates than coal

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yet avoidable, public health issues due to metals, carcinogens, CO, CO2, NOx, and other pollutants in the air, soil and water; abuse of the will of Kentuckians and our laws. All this for a tiny handful of jobs. All this just to demonstrate cheap energy in the state with the cheapest energy, and a solid waste disposal solution in a state that solved that problem 10 years ago.

The environmental virtues of IGCC are offset by the MSW costs: massive chronic train loads of trash, importing hazardous metals and organic compounds as garbage, failing to recycle paper and plastics from 4000 tons/day of MSW, using local landfill space for 500 tons/day of heavy metal laced waste, competition with one of Kentucky's largest cites for scarce water, and burdening the air with a wide array of degrading elements.

Inadequate Design Data

Critical plant design components are missing from the DEIS. The fate of Mercury is a good example-some will be captured as particulates just after the gasifier, and some in the de-sulfurization step, but without the design data, no-one can more than guess what the capture rates are. Congress has mandated the reduction of Mercury, yet there is no visible effort or data in the DEIS to that end. The same can be said for other toxic metals.

Water use is not well documented. A typo in Figure 3.1.1-1 on page 3-14 of the DEIS shows untreated steam being piped to the turbines. The technologies for cleaning the gasification products are ambiguous, and the fate of water used to clean and cool the gases is not clear. The nature and degree of contamination of the 'aqueous effluent' is not detailed. The margin of additional risk to water quality and quantity from the transportation and use of MSW/RDF vs coal cannot be reasonably measured by information in the DEIS. The Trapp site is immediately upstream from the primary water source for the second largest city in the state.

In the absence of information like that shown below, no analysis can be made about the fate of constituents. It is bordering on travesty that DOE published a DEIS absent of the essential design information needed to make any estimate of environmental impact.

The environmental impact of an IGCC plant is a function of the thermal and chemical character of the facility. Section 3.1.2 should address the temperature profile of the pyrolytic products. Examples of the types of information missing are offered below:[24]

24 P. 51 www.nrel.gov/docs/fyosti/29952.pdf and British Gas/Lurgi Gasifier IGCC Base Cases PED-IGCC-98-004 Rev June 2000. pp3-4 URL: www.doe.gov/coalpower/gasification/system/bgl3x_20.pdf

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12/16 (cont.)

24/06

25/07

12/16 (cont.)

Comment No. 15 (cont.) **Issue Code: 06**

for metals such as cadmium, chromium, mercury, nickel, and lead. Coal would appear to produce higher emission rates than RDF pellets for arsenic, beryllium, cobalt, and selenium.

The hazardous air pollutant emission estimates presented in Table 5.7-2 of the EIS are taken from the permit application for the proposed facility. Except for the hydrogen sulfide emission estimate, these underlying emission rates are based on test results for a comparable gas turbine unit fueled with syngas produced from a 100 percent coal feedstock. Those emission rates were used in setting the emission limits in the air quality permit for the proposed project. Those emission limits must be met regardless of whether the fuel feed to the gasification units is coal, RDF pellets, or a mix of coal and RDF pellets. It should be noted that the air quality permit for the project requires annual emissions testing for cadmium, lead, mercury, hydrogen chloride, and dioxins/furans.

Comment No. 16 **Issue Code: 22**

Comment noted. The process to be demonstrated by the Kentucky Pioneer IGCC Demonstration Project and approved for further study under the CCT Program is a new technology that uses a 50-50 ratio co-feed of coal and RDF pellets. All coal for the project will be supplied from within Kentucky. The purpose of the CCT Program is to provide a cleaner and more efficient source of energy from coal resources.

Comment No. 17 **Issue Code: 14**

Chapter 2 of the EIS discusses EKPC's 1998 Power Requirements Study which indicates that the electrical load for the region is expected to increase by 3.0 percent per year through 2017. Net winter peak demand is expected to increase by 3.3 percent per year and net summer peak demand is projected to increase by 3.0 percent per year. Peak demand is projected to increase from 2,031 MW in 1998